

Claims

1. An umbrella device (10, 110, 210) with a shank (12, 112, 212) and an umbrella-like cap (11, 111, 211), which can rotate around the shank and can be opened up, characterized in that the umbrella-like cap (11, 111, 211) can be motor-driven and is constituted by a membrane (21, 121, 221) of low flexural strength, but having tensile strength, with a circular base surface, which can be erected by means of centrifugal forces, resulting from the rotation, from a position of rest, wherein it droops limply around the shank (12, 112, 212), and opened into an essentially horizontal position.

2. The umbrella device in accordance with claim 1, characterized by a motor drive (15) at the head of the shank (12, 112, 212), which shank is fixed against relative rotation.

4. The umbrella device in accordance with at least one of claim 1 to 3, characterized in that the drive (15) is constituted by an electric motor.

4. The umbrella device in accordance with claims 1 and 2, characterized in that the membrane (21, 121, 221) is maintained, preferably clamped, by means of two disks (17, 18), which are coupled, fixed against relative rotation, with the shaft (16) of the motor drive (15).

5. The umbrella device in accordance with at least one of claim 1 to 3, characterized in that a pneumatic drive is provided.

6. The umbrella device in accordance with at least one of the preceding claims, characterized in that the energy supply for the motor drive (15) is received in the shank (12, 112, 212).

7. The umbrella device in accordance with at least one of the preceding claims, characterized in that the membrane (21) has a pagoda-shaped cut-out shape, matched to the specific influencing variables.

8. The umbrella device in accordance with at least one of the preceding claims, characterized in that the membrane (21) is provided with ballasting (30).

9. The umbrella device in accordance with claim 8, characterized in that the membrane (21) is provided with radially and/or annularly arranged cords (31, 32).

10. The umbrella device in accordance with claim 8 or 9, characterized in that the membrane (21) is provided with additional masses on the outer circumference, such as a cord at the edge, individual weights, doublings of the membrane, or the like.

11. The umbrella device in accordance with at least one of the preceding claims, characterized in that the membrane (21) has a double-layered shape in cross section.

12. The umbrella device in accordance with at least one of the preceding claims, characterized in that the membrane (121) has a flat, pillow-like shape.

13. The umbrella device in accordance with claim 12, characterized in that the pillow-like membrane (121) is divided into radially and/or annularly arranged air chambers (44).

14. The umbrella device in accordance with claim 13, characterized in that the air chambers (44) are connected with a blower.

15. The umbrella device in accordance with claims 14 and 5, characterized in that the air chambers (44) are connected with a pneumatic drive (15).

16. The umbrella device in accordance with at least one of the preceding claims, characterized in that the inside of the membrane (221), which is in the position of rest, can be charged with compressed air.

17. The umbrella device in accordance with claims 16 and 5 or 6, characterized in that the shank (212) is provided with air outlet openings (46) in the area of the membrane (221), which is in the position of rest.